

Region 3 GPRA Baseline RCRA Corrective Action Facility

Merck and Company, Inc.

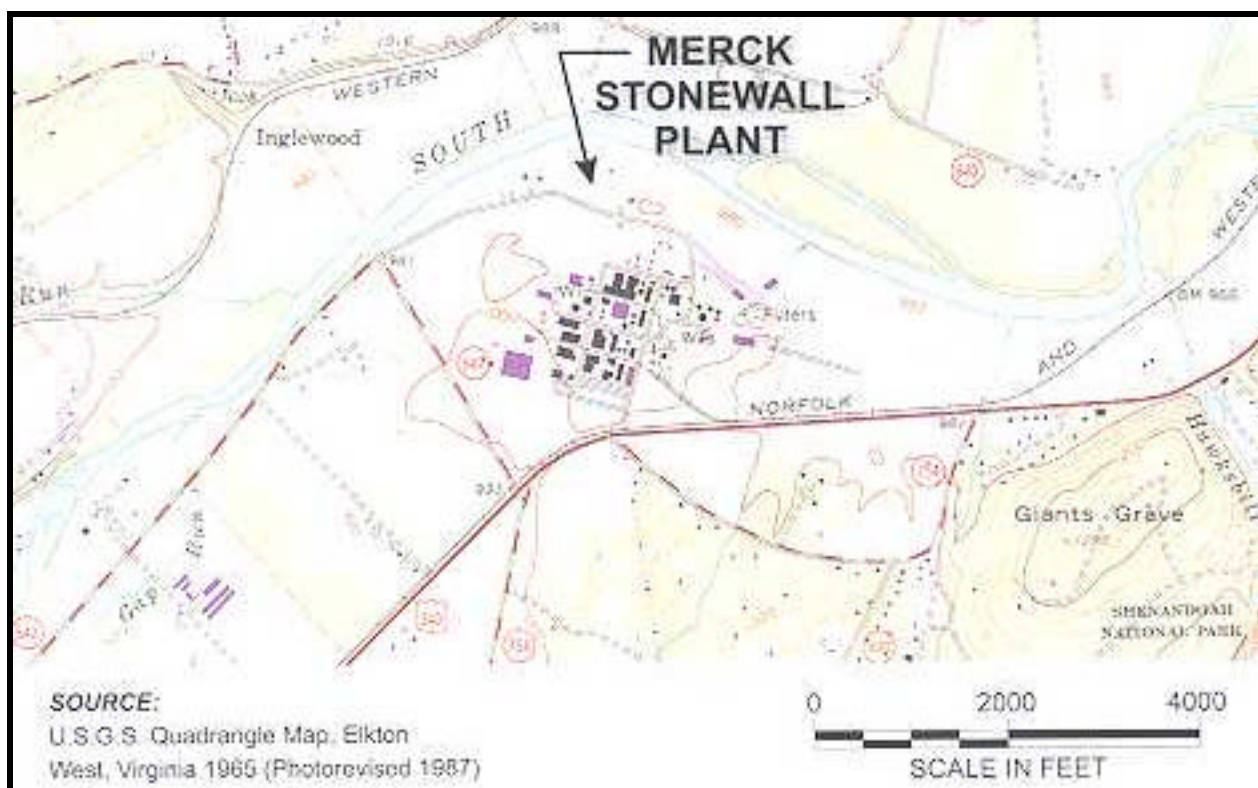
Highway 340 South

Elkton, VA 22827

Congressional District 6

EPA ID #: VAD001705110

Last Updated: July 1, 2005



Current RCRA CA Activities

The Virginia Department of Environmental Quality (DEQ) conditionally approved the Corrective Measures Implementation (CMI) Work Plan on September 8, 2004. Merck conducted several sampling and monitoring events during the first quarter 2005. These events included quarterly groundwater (gw) sampling at the closed landfill, quarterly landfill gas monitoring, site-wide gw sampling, quarterly monitoring natural attenuation (MNA) gw sampling, quarterly surface water sampling, and quarterly site-wide gw elevations were collected. The data collected during these events will be summarized in various reports, which are to be submitted to the DEQ during the second and third quarters of 2005. Also, the DEQ visited the Merck facility on May 10, 2005 to evaluate the biosparging pilot study which was being conducted.

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The DEQ gave interim authorization to proceed with Merck's proposed biosparging pilot study for the area north of the landfill on February 3, 2005. The 2-month pilot study began in May 2005 and resulting data will be used to design the full-scale corrective action north of the landfill. Merck has already begun preliminary designs for the full-scale bioventing for the area of concern (AOC) South and biosparging for the AOC North. On-site groundwater flow is controlled by continuous production well pumping. Merck estimates that approximately 30% of the CMI activities are complete at the Stonewall site.

Site Description

Merck is located in northwestern Virginia, approximately 2 miles southwest of Elkton. The plant lies in the Shenandoah Valley, just SE of the South Fork of the Shenandoah River. The facility occupies approximately 1,300 acres, however, active operations occur on only 89 acres.

The Facility began operation in 1941. Prior to that, the land was undeveloped. The facility includes a pharmaceutical laboratory and manufacturing facilities, which produce animal and human health care products. The plant is supported by a wastewater treatment plant, a solvent recovery operation and a powerplant with co-generation facilities. Additionally there is an onsite, permitted, industrial landfill. The landfill occupies 7 acres located in the northeastern corner of the property. Prior to 1980, various production wastes, including organic and inorganic chemicals from the Plant operations were disposed of in the landfill. Merck property borders the landfill on all sides. The landfill was capped in 2000 as one of the corrective measures to be implemented.

The current RCRA permit became effective on April 5, 2002 and shall remain in effect until March 6, 2012. The facility is permitted to store hazardous wastes in containers. The Corrective Measures Study report was approved by EPA on May 7, 1999. The facility is currently in the Corrective Measures Implementation (CMI) phase of RCRA Corrective Action.

RCRA CA Milestones

In October 1989, EPA issued a RCRA Administrative Order to Merck. EPA issued the Statement of Basis on July 2, 1999. A public meeting was held in September 1999. The Final Decision and Response to Comments (FDRTC) was issued in March 2001. The DEQ has incorporated the requirements of the FDRTC and the previously issued Solid Waste Management Permit into the facility's RCRA operating permit. The final RCRA permit became effective on April 5, 2002 and shall remain in effect until March 6, 2012.

The Corrective Measures Study report was approved by EPA on May 7, 1999. The facility is currently in the Corrective Measures Implementation (CMI) phase of RCRA Corrective Action. The CMI was conditionally approved by the DEQ on September 8, 2004.

Environmental Indicator Status

Under the Government Performance and Results Act (GPRA), EPA has set national goals to address high priority RCRA Corrective Action facilities by the year 2005. EPA is evaluating two key indicators for each facility: Current Human Exposures Under Control and Migration of Contaminated Groundwater Under Control. This facility is one of EPA Region III's high priority facilities and falls under this initiative. As of September 29, 2003, the current evaluation of Environmental Indicators for this facility is as follows:

- *Human Exposures Controlled Determination:* IN: Additional information is needed to determine if Human Exposures are Controlled. Please refer to form CA725 dated September 29, 2003 for more details.
- *Release to Groundwater Controlled Determination:* IN: Additional information is needed to determine if Human Exposures are Controlled. Please refer to form CA750 dated September 29, 2003 for more details.

Contaminants

The primary contaminants of concern in the groundwater include benzene, chlorobenzene, chloroform, methylene chloride, naphthalene, trichloroethene, vinyl chloride, and vanadium. The contaminants of concern in surface and subsurface soils include several VOCs and SVOCs..

Institutional Controls

A Deed Notice is in place identifying the location of the closed solid waste landfill.

Community Involvement

Citizens questions and concerns have been addressed throughout the RCRA Corrective Action process. A Community Relations Plan is currently being developed in conjunction with the CMI Workplan. Additionally, the Administrative Record had been made available at the repository listed below to give the community immediate access to the RFI Report and the CMS Report. The Administrative Record containing relevant information is available for public review at the following location(s):

Massanutten Regional Library
174 South Main Street
Harrisonburg, VA 22801
Phone: (540) 434-4475

The Administrative Record may be accessed during normal library hours, 9am-9pm Monday-Thursday, 9am-6pm Friday, and 9am-5pm Saturday. Additional information concerning the library may be found at the website <http://www.mrlib.org/mainlibrary.htm>.

Government Contacts

The Commonwealth of Virginia has the lead authority for this project. Please contact the state project manager listed below for details on this project or the contents of this fact sheet.

DEQ Project Manager:

Matthew M. Stepien
Virginia Department of Environmental Quality
P.O. Box 10009
Richmond, VA 23240-0009
Phone: (804) 698-4026
Email: mmstepien@deq.virginia.gov

EPA Project Manager

Ms. Estena McGhee - 3WC23
U.S. Environmental Protection Agency - Region III
1650 Arch Street
Philadelphia, PA 19103-2029
Phone: (215) 814-3433
Email: mcghee.estena@epa.gov

For more information about EPA's corrective action program, including Environmental Indicators, please visit EPA's web site at: www.epa.gov/reg3wcmd/correctiveaction.htm

Facility Contact

The facility contact as listed in the RCRA permit is:

Dr. Helen L. Penrod
Project Coordinator Merck & Co., Inc.
Stonewall Plant
P.O. Box 7
Elkton, VA 22827
Phone: (540) 298-5487

Factsheet Updates

The previous factsheet was updated January 2005. The next update is scheduled for December 2005. Previous factsheets may be obtained through the listed contacts.